Maine Weekly Influenza Surveillance Report

April 29, 2009

Synopsis

During the week ending April 25th, 2009 (MMWR week 16)*, Maine reported regional influenza activity. There were two outbreaks of influenza like illness reported during week 16, both in long term care facilities.

H1N1 (Swine Influenza)

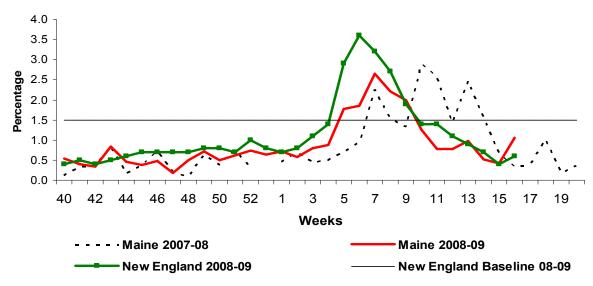
As of April 29, 2009, specimens tested at HETL came back Influenza A, unable to subtype. This makes these cases probable for swine influenza, pending confirmation testing. Additional testing is pending at federal CDC. For the most up to date information on swine influenza, please see our website at http://www.maine.gov/dhhs/boh/swine-flu-2009.shtml

Moderate Disease Surveillance

Outpatient influenza-like illness (ILI)

During the week ending April 25^{th} , 2009, 1.1% of outpatient visits reported by seven Maine Sentinel Providers were for influenza-like illness (ILI). ILI is defined as fever ($\ge 100^{\circ}$ F / $\ge 37.8^{\circ}$ C) AND cough or sore throat in the absence of a known cause. In the New England States, 0.6% of outpatient visits were attributed to influenza-like illness during week 16.

Outpatient Visits for Influenza-like Illness - Maine, 2007-09



New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

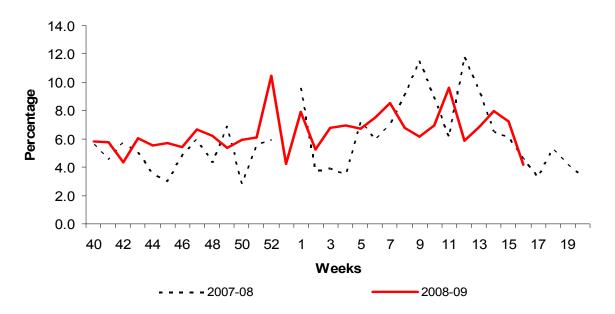
^{*} At time of publication, reporting may be incomplete. Numbers presented here may change as more reports are received.

Severe Disease Surveillance

Hospital inpatients

During the week ending April 25th, 2009, 4.2% of hospital admissions reported by three hospitals were attributable to pneumonia or influenza.

Hospital Admissions Due to Pneumonia or Influenza -- Maine, 2007-09

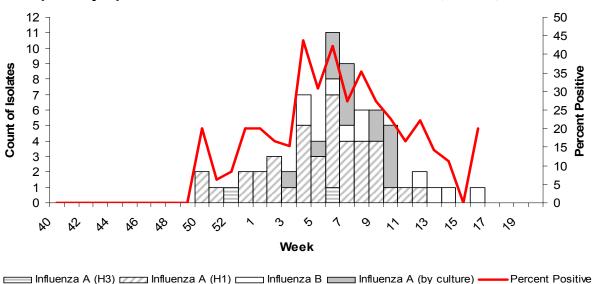


Laboratory Reporting

During the week ending April 25th, 2009, five samples were submitted for testing to the Maine Health and Environmental Testing Laboratory (HETL). One tested positive for influenza B.

To date, 316 samples have been submitted, 67 (21.2%) were positive for influenza: 40 for influenza A H1, two for influenza A H3, 15 for influenza A (by culture), and ten for influenza B. The influenza B strains will be forwarded to the federal CDC for lineage typing.

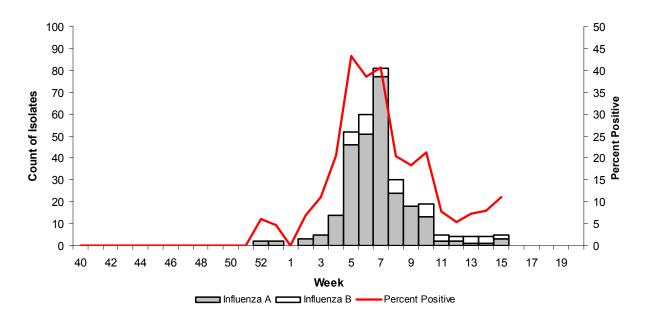
Respiratory Specimens Positive for Influenza from HETL, Maine, 2008-2009



During the week ending April 25th, 2009, 21 samples were submitted for testing to one private reference laboratory; three tested positive for influenza A. Eight samples were positive for RSV.

A combined total of 1,741 specimens have been submitted since September 28, 2008 for respiratory testing to two private labs. To date, 267 samples were positive for influenza A, 44 samples were positive for influenza B, 296 samples were positive for RSV, 12 samples were positive for parainfluenza 3, five samples were positive for adenovirus, and two samples were positive for enterovirus.

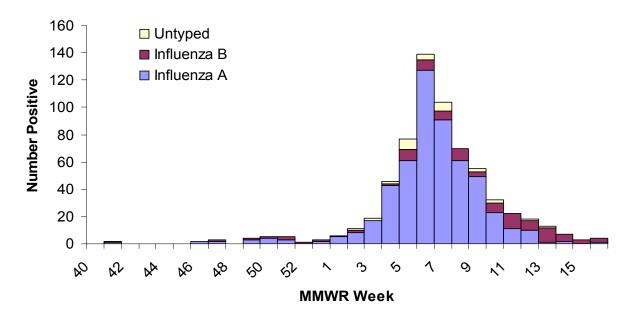
Respiratory Specimens Positive for Influenza from Two Reference Laboratories, Maine, 2008 - 2009



Rapid tests are often used in clinical practice and these results contribute to the determination of the state influenza activity code reported to the federal CDC. Many hospitals, laboratories, and physicians' offices report these test results to the state. There is the possibility of duplication of results from reference labs and the rapid report called into the state. However, since influenza is not required to be reported, it is still assumed that these numbers are an underrepresentation of the true burden of influenza.

During the week ending April 25th, 2009, four samples tested positive using rapid testing, three for influenza B, and one for influenza A. A combined total of 651 positive rapid tests have been reported this season. 527 were positive for influenza A, 94 were positive for influenza B, and 30 were not typed.





Outbreaks

During the week ending April 25th, 2009, two new outbreaks of influenza-like illness were reported, both in long term care facilities. One outbreak was reported from the Downeast district, had an attack rate of 26%, and was not able to be confirmed. The other outbreak was in the Western District, had an attack rate of 11% and was confirmed to be Influenza A. To date, 32 outbreaks of influenza-like illness have been reported; 18 in long term care facilities and 14 in schools.

Influenza-like illness outbreaks by selected characteristics - Maine, 2008-09

	initidenza-like lililess outbreaks by selected characteristics – Maine, 2000-03										
	Facility	District	Date	Attack Rate (%)		Hospital-	Deaths	Vaccination		Lab-	
	Type*		Reported			izations		rate (%)		confirmed	
				Student/		#	#	Student/			
				Resident	Staff			Resident	Staff		
1	LTC	Cumberland	11/21/2008	6	1	0	0	100	68	No	
2	LTC	Mid Coast	1/22/2009	4	0	2	0	96	50	Influenza A	
3	LTC	Western	1/26/2009	2	0	1	0	99	50	Influenza A	
4	LTC	Cumberland	1/30/2009	2	0	1	0	96	64	Influenza A	
5	School	York	2/2/2009	26	2	٨	٨	٨	٨	Influenza A	
6	School	Penquis	2/4/2009	1	0	1	٨	٨	٨	Influenza A	
7	School	Mid Coast	2/9/2009	26	13	٨	٨	٨	٨	No	
8	School	Mid Coast	2/9/2009	27	14	٨	٨	٨	٨	No	
9	LTC	York	2/10/2009	3	0	1	0	95	40	Influenza A	
10	School	Downeast	2/10/2009	4	٨	٨	٨	٨	٨	Influenza A	
11	School	Mid Coast	2/10/2009	19	0	۸	۸	۸	٨	Influenza A & B	
12	School	Mid Coast	2/2/2009	23	5	٨	٨	٨	٨	Influenza A	

13	LTC	Mid Coast	2/10/2009	5	٨	٨	٨	٨	٨	Influenza A
14	School	Mid Coast	2/10/2009	46	4	٨	٨	٨	٨	Influenza A
15	School	York	2/11/2009	15	15	٨	٨	٨	٨	٨
16	School	York	2/11/2009	15	٨	٨	٨	٨	٨	Influenza B
17	School	Western	2/13/2009	39	٨	٨	٨	٨	٨	Influenza A
18	LTC	Mid Coast	2/17/2009	14	24	0	2	96	20	Influenza A
19	LTC	Western	2/19/2009	2	0	0	0	٨	٨	Influenza A
20	School	Central	2/23/2009	2	٨	٨	٨	٨	٨	Influenza A & B
21	LTC	Western	2/23/2009	8	0	2	0	95	40	Influenza A
22	School	Western	2/25/2009	15	5	٨	٨	50	٨	Influenza B
23	LTC	Western	2/25/2009	8	0	0	0	٨	٨	Influenza A
24	LTC	Central	2/26/2009	46	22	0	0	100	32	Influenza B
25	LTC	Cumberland	2/26/2009	2	0	1	0	96	46	Influenza A
26	LTC	Central	3/3/2009	53	12	3	0	93	68	Influenza A
27	LTC	Aroostook	3/3/2009	17	٨	1	0	٨	٨	Influenza A (H1)
28	LTC	Aroostook	3/3/2009	13	1	0	0	95	٨	Influenza A
29	LTC	Western	3/6/2009	٨	٨	0	٨	100	٨	Influenza A
30	School	Mid Coast	3/24/2009	30	0	٨	٨	٨	۸	Influenza A & B
31	LTC	Downeast	4/21/2009	26	15	2	0	100	98	No
32	LTC	Western	4/20/2009	11	0	1	٨	~67	٨	Influenza A

^{*} Outbreak definition is specific to facility type. An outbreak in long-term care facilities (LTC) is defined as ≥3 patients with ILI identified on same floor or ward during a short (e.g., 48-72 hour) period OR ≥1 patients with lab-confirmed influenza; an outbreak in an acute care facility (ACF) is defined as ≥1 patients with ILI or lab-confirmed influenza with symptom onset ≥48 hours post-admission (i.e., nosocomial); and an outbreak in a school is defined as >15% absentee rate among student population due to ILI or lab-confirmed influenza.

NA indicates not applicable

York District: York county

Cumberland District: Cumberland county

Western District: Franklin, Oxford, and Androscoggin counties Mid Coast District: Waldo, Knox, Lincoln and Sagadahoc counties

Central District: Somerset and Kennebec counties Penquis District: Piscataquis and Penobscot counties Downeast District: Washington and Hancock counties

Aroostook District: Aroostook county

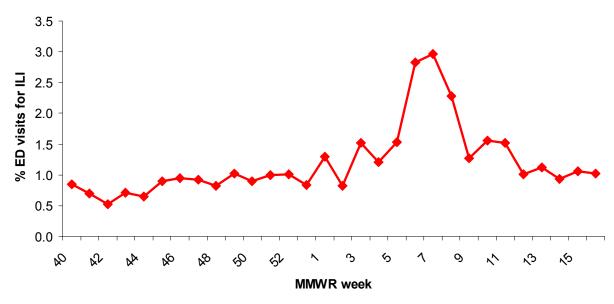
Syndromic Surveillance

1.0% of visits to emergency departments at seven of Maine's hospitals were characterized as influenza-like illness during week 16, based on the patients' chief complaint.

[^] Data unavailable

^{**}Maine DHHS Districts:

Emergency Department Visits for ILI at Seven Hospitals - Maine, 2008-09

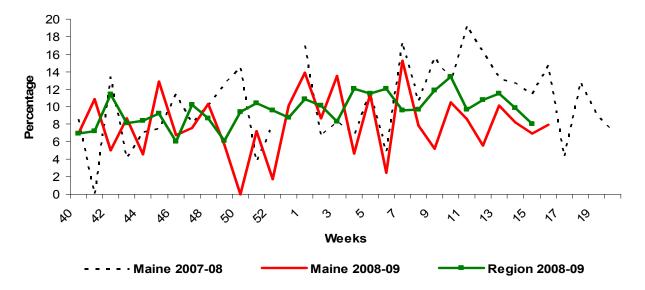


Fatalities Surveillance

Death Certificates

During the week ending April 25th, 2009, 7.9% of deaths reported by three city vital records offices were attributable to pneumonia and influenza.

Percentage of Deaths Attributable to Pneumonia and Influenza - Maine, 2007-09



Pediatric Fatalities

No influenza-associated pediatric deaths in Maine have been reported this season.

National Influenza Activity

State health departments report the estimated level of influenza activity in their states each week. States report influenza activity as: 1) no activity, 2) sporadic, 3) local, 4) regional, or 5) widespread (definitions of these levels can be found at: www.cdc.gov/flu/weekly/usmap.htm). Maine reported regional activity for the week ending April 25th, 2009 (week 16).

